Health o meter®
Professional

Model 2210KL / 2210KL4
High Resolution Digital Neonatal/Pediatric Tray Scale

2210KL

2210KL4

User Instructions

PELSTAR, LLC 9500 West 55th St. McCook, IL 60525-7110 USA www.homscales.com

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P/N UM2210KL 2210KL4 Rev20171218

Thank you for your purchase of this Health o meter® Professional product. Please read this manual carefully, and keep it for easy reference or training.

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Note: This scale has been factory calibrated, and does not require calibration prior to use.

Please register your scale for warranty coverage at:
www.homscales.com/product-support/technical-support/product-warranty-registration

For User Instructions updates and revisions please go to:
www.homscales.com

CAUTIONS AND WARNINGS

INTENDED USE

This Health o meter® Professional neonatal/pediatric scale is intended to be used in a professional medical environment by trained medical staff. This product was designed to weigh pediatric patients who are safely positioned on the scale tray. Do not modify the product or use it for anything other than its intended purpose.

To prevent patient/caregiver injury or damage to your scale, please follow the instructions in this user manual very carefully.

- Do not exceed the weight capacity specified for this scale.
- For accurate weighing, this scale must be placed on a flat, stable surface.
- For accurate weighing, verify before each use the proper operation according to the procedure described in this manual.
- Do not use in the presence of flammable or explosive materials.
- If the scale becomes damaged, it should not be operated until properly serviced.
- Do not transport the scale with a patient or object on the scale.
- Ensure that the scale does not come in contact with liquids, excessive temperature, or excessive humidity.
- Do not gas sterilize or autoclave the scale.
- Scales contain delicate sensors. Do not bang into doors, walls, etc., as damage may result.

Patient Safety

- This scale is designed for static weighing of patients only. No scale should be used for patient transfer.
- To prevent patient injury, the patient must be attended throughout the entire weighing event.

When operating the scale with batteries:

- If the display indicates low battery, replace the batteries as soon as possible.
- When replacing / inserting batteries, be sure to use all new batteries.

In no event shall Pelstar, LLC be liable for damages or injuries whatsoever arising out of or connected with the assembly, use, or misuse of its products.

SPECIFICATIONS FOR THIS SCALE

General

Health o meter® Professional scales use the most sophisticated microprocessor technology available. Each precision instrument is designed to provide accurate, reliable and repeatable weight measurements, as well as other features that make the weighing process simple, fast and convenient.

In order to achieve satisfactory results, the operator must read this manual thoroughly before using this scale.

If any questions arise regarding this scale or its use, please contact
Health o meter® Professional Scales Customer Service at 1-800-815-6615.

2210KL / 2210KL4 Scale Specifications

Capacity and Resolution	20000 grams / 20 kg / 45 lb Resolution: 0 – 11300 g (0 – 25 lb) (0 - 10 kg) +/- 1g (+/- 0.1 oz); > 11300 g (> 25 lb) (> 10 kg) +/- 5 g (+/- 0.1 oz)	
Power Requirements	6 C-Cell Alkaline batteries	
Environmental	Operating temperatures: 68°F to 85°F (20°C to 30°C) Storage temperatures: 14°F to 122°F (-10°C to 50°C) Maximum Humidity: 95% RH	
Physical Dimensions	**2-sided Tray:** Width: 24” (610mm) Depth: 15 3/8” (391mm) Height: 3” (76mm)	**4-sided Tray** Width: 27” (686mm) Depth: 15 3/8” (391mm) Height: 3” (76mm)
	2210KL Product Footprint Width: 25 1/2” (648mm) Depth: 17 3/8” (441mm) Height: 5 3/8” (137mm) Weight: 24.4 lb (11 kg)	**2210KL4 Product Footprint** Width: 27” (686mm) Depth: 17 3/8” (441mm) Height: 5 3/8” (137mm) Weight: 25.2 lb (11.4 kg)

CERTIFICATIONS / DISPOSAL

Certification Descriptions

ISO13485:2003 CERTIFIED	Pelstar, LLC has been officially certified as the manufacturer of Health o meter® Professional medical devices. The Pelstar, LLC quality assurance system covers the development, production, sales and service of medical scales and measuring systems.
	This product is tested to and meets the requirements of: 1. CSA C22.2 No. 601-1 M90: Medical Electrical Equipment

Scale Disposal

This Health o meter® Professional scale must be disposed of properly as electronic waste. Follow the national, regional or local regulations which apply to you for disposal of electronic waste or batteries. Do not dispose of this device in the domestic waste stream.

ASSEMBLY INSTRUCTIONS

Before Assembly

Each 2210KL / 2210KL4 neonatal/pediatric tray scale is shipped disassembled in one carton. Carefully inspect the carton for shipping damage before unpacking. If damage is found, contact your shipper or a Health o meter® Professional representative immediately at 1-800-815-6615. Claims must be filed with the shipper as soon as possible after receipt of the package. The following information details what you will find inside the main carton as you unpack the parts for assembly.

To prevent scratching any components, carefully remove each assembly from the carton and unwrap the packing materials. Set the carton aside for storage. To avoid damaging the scale parts when unpacking, do not use a box cutter, knife, scissors, or any sharp object to open the protective inner packaging.

Parts List

Carton

(1) Scale platform
(1) Acrylic tray
(6) C-cell Alkaline batteries
(1) User instructions

Tools Required

Phillips head screwdriver (not included)

ASSEMBLY INSTRUCTIONS (CONTINUED)

Assembling the Scale

This scale is powered by six (6) standard disposable C-cell alkaline batteries. Use the following procedure to install the batteries:

1. Remove the scale top cover by removing the six (6) screws (Fig. 1a).

2. Locate the battery tray (in the rear center of the scale platform). It has a white cover that is held down with two screws. Remove the screws and battery cover.

3. Insert new batteries. Note the orientation that is shown on the bottom of the battery tray.

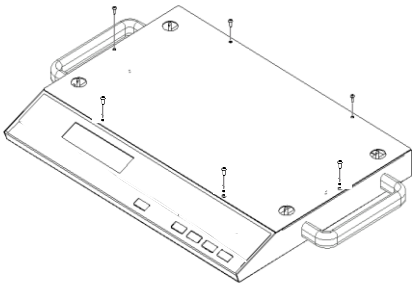


Figure 1a: Remove Scale Cover

4. Replace the battery tray cover and screws. Before installing scale cover, press **ON/ZERO** to ensure scale turns on.

5. Reinstall the scale cover. Start partially inserting the (6) screws. Once cover is centered, tighten screws fully.

6. Place the scale platform on a table top with the display buttons facing you.

7. The acrylic tray has a built-in measuring tape. Align the tray so that the rule is positioned over the back end of the scale platform (Fig. 1b).

8. Carefully lower the tray onto the four mounting pins on the scale platform. When the tray is properly aligned with the pins, gently push down on the tray over each pin until it snaps into its locked position. When properly positioned, there will be about a 3/8" space between the platform top and the bottom of the tray.

Always lift the scale by the black handles only – never by the tray.

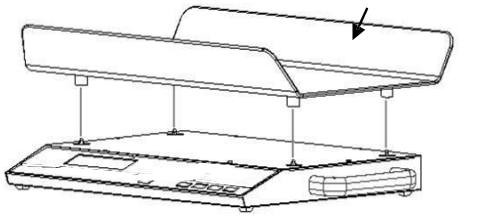
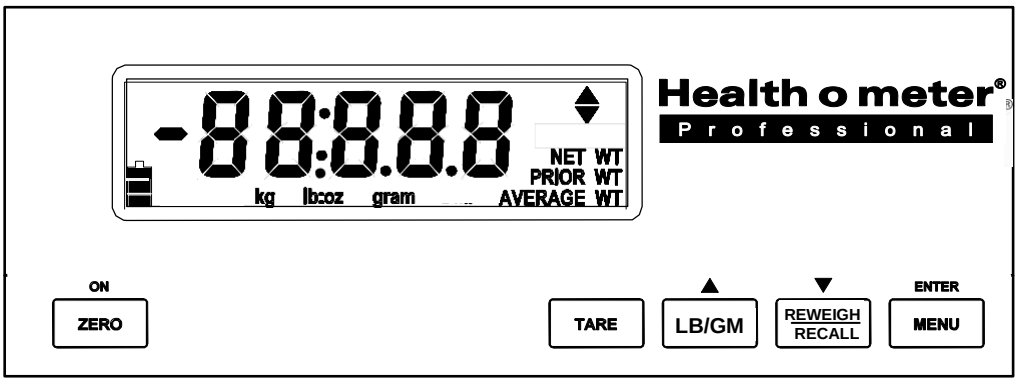
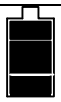


Figure 1b: Install Tray

OPERATING INSTRUCTIONS



Screen Icons

Icon	Description
	Indicates level of battery power remaining.
kg	Indicates weight mode is in kilograms.
lb:oz	Indicates weight mode is in pounds/ounces.
gram	Indicates weight mode is in grams.
NET WT	Is displayed when a weight is tared.
PRIOR WT	Is displayed after a weight measurement.
AVERAGE WT	Is displayed when motion is detected during a weight measurement.

Keypad Buttons

Note that some buttons perform multiple functions.

Function	Description
ON/ZERO	Press to turn scale on or reset to zero.
TARE	Used to perform the tare function and deducts the weight of an object on the tray.
LB/GM	Toggles the unit of measurement between Pounds and Grams in LB/GM mode or Kilograms and Grams in KG/GM mode. See User Setting Options on page 13 for instructions on changing unit of measurement mode. Secondary function is the up arrow and is used for menu selection.
REWEIGH	Allows repeating weighing of the patient without stepping off the scale.
RECALL	Recalls previous weight measurement. Secondary function is the down arrow and is used for menu selection.
MENU	Used for advanced programming functions. Secondary function is the ENTER button and is used for menu selection.

OPERATING INSTRUCTIONS (CONT)

Weighing a Patient

1. Press blue **ON/ZERO** button. Make sure “0” appears on display.
2. Place baby on tray.
3. Allow scale to lock onto the weight. The scale will beep and display “PRIOR WT” when the weight is locked.
4. Remove baby from tray. Measurement value remains on the display until it is cleared.
5. To clear the displayed weight and ready the scale for the next weighing, press blue **ON/ZERO** button.

The 2210KL scale comes standard with these features.

1. Auto-Zero: The scale will automatically display “0” when turned on. If the display reads between “-20 gram” and “20 gram” at any time, regardless of what is on the tray, the scale will automatically reset to “0” after 8 seconds.

2. English/Metric Readout: With normal operation you may switch the display units between grams (or kilograms) and pounds at any time before or after a weighing. When turned on, the scale will display the last used unit of measure.

3. Tare Option: An object weighing more than 30 grams can be subtracted from the total weight to determine the net weight.

4. Weightlock: Any weight over 512 grams will lock in so that no further weighings can take place until the weight is cleared by pressing **ON/ZERO**. The measurement will display even after the baby is removed from the tray so that the caregiver can attend to the baby first before recording the weight. The value is retained in memory and can be reacalled even after the scale turns itself off.

5. Motion Detection: In most cases the scale will display a true, accurate weight based on a series of consistent and stable measurements. However, if a baby or object is moving on the tray, the scale may not achieve consistent readings that are required to give a “stable” weight. This condition is indicated by Weightlock not activating on the display. If the movement on the tray continues for seven seconds, the scale will automatically activate the motion detection feature and the infant’s weight and “AVERAGE WT” will be displayed.

Because of the movement on the platform, average weight indicates that the scale was not able to achieve a true measurement in line with the listed accuracy specification. However, the average weight deviation from the true weight of the baby will be minimal, based on the severity of the motion during the weight reading.

6. Auto-Off: As a battery saving feature, the scale will automatically turn off when not being used. The length of the Auto-Off timeout is programmable by the user. The factory setting is one minute.

OPERATING INSTRUCTIONS (CONT)

Using the Tare Function

When using this scale, the weight of an object, such as a blanket, on the scale with the baby being weighed can be subtracted from the total weight to determine the net weight of the baby alone. The Tare function automatically performs this subtraction, avoiding the need for manual calculations.

Figure 3: Tare button

Figure 4: Net weight display

1. Turn the scale on and wait for the display to read “0”.
2. Place the object (i.e. blanket) on the tray. The weight of the object will be displayed.
3. Press the TARE button. “NET WT” and “0.0” will be displayed.

If the object is removed from the platform, its weight will be displayed as a negative value.

4. Place the baby on the tray with the object. The readout will now display the baby’s net weight.
5. Press **ON/ZERO** to return the scale back to normal weighing operation.

Using the Weightlock Function

When using this scale, the weight of any object over 512 grams will be locked on the display even after the baby has been removed from the tray. This allows the caregiver to tend to the needs of the baby first before recording the weight. This value can be recalled even after the scale has turned off.

When the baby’s weight is locked, “PRIOR WT” is displayed (Fig. 5). The weight will remain displayed even after the baby is removed from the tray. No further weighings can take place until the weight is cleared by pressing **ON/ZERO** or **REWEIGH/RECALL** (Fig 6).

Figure 5: Weightlock display

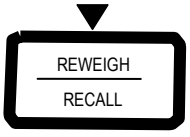


Figure 6: Reweigh/Recall button

Using the Reweigh Function

The Reweigh function is used to reweigh the baby while he or she is still on the tray.

To reweigh, the baby should remain on the tray and a weight measurement should be on the display. Simply press **REWEIGH/ RECALL.**

Using the Recall Function

The Recall function is used to recall the last weight measurement after the scale has shut down or the display was cleared.

The scale automatically stores the last weight measurement. This value is stored until a new measurement is taken or it is intentionally cleared by pressing **ON/ZERO**.

To recall a weight value after the baby's weight has been measured, the baby has been removed from the tray and the display is off, press **ON/ZERO** and then **REWEIGH/ RECALL**. The stored value will now display.

To clear the recalled weight and unlock the scale for more weighing, either press **RECALL** or **ON/ZERO.**

Programming Auto-Off Time

The 2210KL / 2210KL4 has been pre-set at the factory to shut down after one minute of inactivity. This can be changed to any increment (from 12 seconds to 25 minutes) to suit your needs.

1. Press **ON/ZERO** and wait for the display to show "0.0". Do not place anything on tray.
2. Hold the **MENU** button down and press the **RECALL** button. "Set-0" will be displayed along with the up and down arrows; the "0" will be flashing.
3. Press the ▲ button repeatedly until "Set-3" appears, press **ENTER**.
4. The Auto-Off time currently programmed in the scale will display as minutes and tenths of minutes (i.e. "03.2"); the far left digit will be flashing. Use the ▲and ▼ buttons to set the desired value, press **ENTER** to advance to the next digit. For example, setting the time to "00.5" will turn the scale off after 30 seconds of no use; "02.0" will turn the scale off after 2 minutes; "25.0" will turn the scale off after 25 minutes.
5. Press **ENTER** when complete to save and return to normal weighing operation.

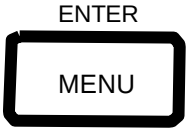


Figure 7: Menu button

Motion Detection

Motion detection uses a proprietary technology that automatically provides accurate weight measurement when there is motion on the tray.

If there was considerable motion during the weight measurement, motion detection will activate after seven seconds and “AVERAGE WT” will be displayed along with the weight measurement and “PRIOR WT” (Fig. 8).

Figure 8: Motion detected during weighing

Battery Life Indicators

This scale has excellent battery life with most users getting more than two years from a single set of batteries. Your battery longevity will vary with the frequency of use and the length of the Auto-Off timer. To help ensure you are never without the use of your scale, the display shows the amount of charge left in the batteries.

- **Battery Icon:** Located in the bottom left corner of the LCD display is an icon of a battery. With new batteries, all three segments will be dark. As the batteries become depleted, the segments will turn off.
- **Flashing Battery:** When the battery icon is empty and the frame is flashing, replace the batteries. (Fig. 9).

NOTE: *Properly dispose of old batteries. Install six (6) new alkaline C-cell batteries. Do not mix new and used batteries.**See page 7 for battery replacement instructions.*

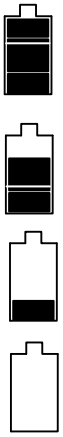


Figure 9: Battery Indicators

OPERATING INSTRUCTIONS (CONT)

User Setting Options

Your scale has three additional settings that you may customize for your specific needs.

Tone on/off: A tone sounds whenever a weight is locked or a button is pressed. (Factory setting is "on".)

Unit lock: The **LB/GM** button can be disabled so that the scale will weigh in only the selected unit of measure. (Factory setting is "unlocked".)

Unit display: The metric unit of measure may be displayed in lb/grams (i.e. 2541 gram) or lb/kilograms (2.541 kg). (Factory setting is grams.)

To change any (or all) of these settings:

1. Press **ON/ZERO** button and wait for the scale to display "0.0".
2. Hold **MENU** button down and press **RECALL** button. "Set-0" will be displayed and the "0" will be flashing.
3. Press the ▲ button repeatedly until "Set-5" appears. Press the **ENTER** button. "11011" will display. Each setting corresponds to a digit within "11011". Use the ▲ and ▼ buttons to input your desired setting. Press **ENTER** when your selection is complete. Press **ENTER** to advance to the next digit/setting. If no other settings need to be changed press **ENTER** until the scale returns to zero.

Note: The third and fourth digit positions are not currently used. Press **ENTER** to advance to the fifth digit.

TONE ON/OFF
Tone on/off setting is changed with the first digit. When entering the settings menu, "11011" will display with the left most "1" flashing. To keep the tone sounds on, select "1". To turn the tone sounds off, select "0". Example: Sound on = 11011 Sound off = 01011

UNIT LOCK
Unit Lock is changed with the second digit. To enable or disable the LB/GM button "1" = unlocked, "0" = locked. Example: Unlock = 11011 Locked = 10111

UNIT DISPLAY
The unit display is changed with the fifth (right most) position. This controls whether the display weighs in lb/grams or lb/kilograms: "1" = lb/gram, "0" = lb/kg. Example: LB/KG display = 11010
LB/GM display = 11011

Moving the Scale

The scale should be lifted by the two black handles only.
For your convenience, an optional wheeled cart is available, model # 2210CART.

NOTE: The scale tray should never be used for transporting a baby or objects. The tray surface must be clear of any objects during transport.

CALIBRATION

Calibration

Your scale has been factory calibrated and does not require calibration prior to use. The following procedure should be performed only to correct any error in calibration. Calibration is protected by a security code to avoid inadvertent access. For maximum accuracy, calibration must be done in grams. If you only have certified weights in pounds, convert them to grams (i.e. 10 pounds = 4536 grams).

Scale Calibration

1. Press the **ON/ZERO** button on the console and wait for the display to show "0.0".
2. Place an accurately known certified weight (3,000 to 5,000 grams. recommended) on the platform. If the display reads other than the known weight value by +/- 1 gram, then the scale is out of calibration.

   ***IMPORTANT NOTE**: A certified weight is a weight that has been accurately calibrated and its license is traceable to NBS weights & measures. Weight room free weights are **not** normally suitable to use as check weights as they may vary from their stated value.*
3. Remove weight from platform. The calibration security code must be entered before attempting to calibrate the scale. Hold the **MENU** button down and press **RECALL** button. Release both buttons. "Set-0" will be displayed and the "0" will be flashing.
4. Press the ▲ button repeatedly until "Set-2" appears. Press the **ENTER** button.
5. Use the ▲and ▼ keys to input "125" as the calibration security code. Press **ENTER** to advance to the next digit. After entering the third digit, press **ENTER** and the scale will return to normal weighing mode. The security code needs to be entered only once, unless the scale is powered off. Access to calibration is denied if the proper code is not entered.
6. With the known weight on the scale, press **REWEIGH**. Quickly, before WeightLock activates, hold the **MENU** button down and press **RECALL** button. Release both buttons. "Set-0" will be displayed and the "0" will be flashing.
7. Press the ▲ button repeatedly until "Set-6" appears. Press the **ENTER** button.
8. A weight value will display representing the current calculation of the known weight. The hundreds of pounds digit will be flashing. Use the ▲ and ▼ keys to input the proper value. Press **ENTER** to advance to the next digit. After entering the tenths of pounds digit, press **ENTER** and "-CAL-" will display while the scale calibrates itself.
9. The readout will then quickly show the old weight, then re-weigh to show the new calibration weight.
10. Remove weight and press the **ON/ZERO** button. Wait for "0.0" to display and verify calibration by placing the same known weight back on the platform.

Calibration Error Code

"Err-4" Scale is below minimum calibration weight. Use at least 1000 grams to calibrate the scale.

TROUBLESHOOTING

Troubleshooting

Before contacting service personnel, refer to the following instructions to check and to correct any failures. If you have further questions, call Health o meter® Professional Scales Customer Service at 1-800-815-6615.

Symptom	Possible Cause	Corrective Action
Scale does not turn on	1. Batteries are not inserted correctly. 2. Batteries are not fully charged.	1. Check that batteries are "seated" properly in battery tray. See assembly section on page 7 to access the batteries and check their positioning. 2. Check that all new and fresh batteries are properly inserted into the battery tray.
Incorrect weight readings	1. Tray is touching a wall or other object. 2. Tray is not level.	1. To test, remove all objects from tray. Turn scale on. Display should read "0". Gently push down on the tray with your finger and release. The display should show some weight value and then quickly return to "0". 2. Ensure the tray is locked completely onto the four locking pins.
Weight reading consistently too high or too low	1. Scale is out of calibration. 2. Possible broken wire in the connector.	1. See Calibration section on page 14 to recalibrate the scale. 2. Contact Health o meter Professional Scales Customer Service at 1-800-815-6615.

MAINTENANCE

Cleaning Procedures

Proper care and cleaning of the scale is essential to ensure a long life of accurate and effective operation. In addition to routine cleaning, include a regular check of all structural apparatus.

All external surfaces can be wiped clean with a damp cloth. A mild soap and water solution may be used as well. Wipe unit dry with a clean, soft towel.

- DO NOT immerse scale platform into any liquids.
- DO NOT use isopropyl alcohol, other such solutions or sanitizing wipes to clean the display surface.
- Do not use abrasive cleaners.
- Check overall appearance of the scale for any obvious damage or wear and tear.

WARRANTY

Limited Warranty

What does the Warranty Cover?

This Health o meter® Professional scale is warranted from date of purchase against defects of materials or in workmanship for a period of two (2) years. If product fails to function properly, return the product, freight prepaid and properly packed to Pelstar, LLC (see "To Get Warranty Service", below, for instructions). If the manufacturer determines that a defect of material or in workmanship exists, the customer's sole remedy will be replacement of the scale at no charge. Replacement will be made with a new or remanufactured product or component. If the product is no longer available, replacement may be made with a similar product of equal or greater value. All replaced parts are covered only for the original warranty period.

Who is Covered?

The original purchaser of the product must have proof of purchase to receive warranty service. Please save your invoice or receipt. Pelstar dealers or retail stores selling Pelstar products do not have the right to alter, or modify or in any way change the terms and conditions of this warranty.

What is Excluded?

Your warranty does not cover normal wear of parts or damage resulting from any of the following: negligent use or misuse of the product, use on improper voltage or current, use contrary to the operating instructions, abuse including tampering, damage in transit, or unauthorized repair or alternations. Further, the warranty does not cover natural disasters, such as fire, flood, hurricanes and tornadoes. This warranty gives you specific legal rights, and you may also have other rights that vary from country to country, state to state, province to province or jurisdiction to jurisdiction.

To get Warranty Service make sure you keep your sales receipt or document showing proof of purchase. Call (+1) 800-638-3722 or (+1) 708-377-0600 to receive a return authorization (RA) number, which must be included on the return label. Attach your proof of purchase to your defective product along with your name, address, daytime telephone number and description of the problem. Carefully package the product and send with shipping and insurance prepaid to:
Pelstar, LLC
Attention R/A#_____
Return Department
9500 W. 55th St.
McCook, IL 60525

Extended Warranty Available
This scale is eligible for Health o meter® Professional ScaleSurance Extended Warranty Program. ScaleSurance extends the warranty period for an additional two years. This extension to the standard Limited Warranty can be purchased with new scales or for a facility's existing scale before its current warranty has expired. To learn more, visit www.homscales.com/scalesurance/ or contact your medical supply distributor.

PELSTAR, LLC

9500 W. 55th St. • McCook, IL 60525 • USA

1-800-638-3722 or 1-708-377-0600

PLEASE REGISTER YOUR SCALE FOR WARRANTY COVERAGE AT:

www.homscales.com

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